Claims

What is claimed is:

1. A sensor loop for distributing indications of a condition monitored at different locations, said sensor loop comprising:

a plurality of sensor units coupled in series to form a closed circuit, wherein each sensor unit comprises:

a local power source;

a local sensor switch; and

a local load, said local load, said local sensor switch and said local power source being coupled in series within said sensor unit.

2. A sensor loop as claimed in claim 1 wherein said local sensor switch is a normally open switch operated to open when said condition is detected.

3. A sensor loop as claimed in claim 1 wherein said local sensor switch is provided by an anemometer.

4. A sensor loop as claimed in claim 1 wherein:

said local loads couple to a solar collector; and

said solar collector is configured to move to a wind stow position when one of said local sensor switches opens.

5. A sensor loop as claimed in claim 1 additionally comprising a local indicator coupled to said local load.

6. A sensor loop as claimed in claim 5 wherein said local indicator couples to said local load through a normally open local load switch.

7. A sensor loop as claimed in claim 6 wherein said local indicator indicates an occurrence of said condition when said local load switch is in an open configuration and indicates an absence of said condition when said local load switch is in a closed configuration.

8. A sensor loop as claimed in claim 5 wherein, for each sensor unit:

said local power source supplies a local voltage;

said local load exhibits a local load impedance;

said local indicator is configured to indicate an absence of said condition when a current substantially equal to said local voltage divided by said local load impedance passes through said local load; and

said local indicator is configured to indicate an occurrence of said condition when substantially no current passes through said local load.

9. A sensor loop as claimed in claim 8 wherein:

said condition is represented by wind speed exceeding a predetermined threshold;

said local sensor is an anemometer; and

said local indicator is a solar collector that is placed in a wind stow position when said wind speed exceeds said predetermined threshold.

10. A sensor loop as claimed in claim 1 wherein:

each local power source supplies a local voltage, and a total voltage equals the sum of all of said local voltages;

each local load exhibits a local load impedance, and a total impedance equals the sum of all of said local load impedances; and

current flowing in said closed circuit substantially equals said total voltage divided by said total impedance.

11. A sensor loop as claimed in claim 1 wherein said local power source provides an output that is isolated from the earth.

12. A sensor loop as claimed in claim 1 wherein at least a portion of said local loads are relay coils.

13. A sensor loop as claimed in claim 1 wherein each of said sensor units additionally comprises a sensor connector having at least first and second sensor-connector contacts configured so that said local power source, said local sensor switch, and said local load thereof are coupled between said first and second sensor-connector contacts of said sensor connector, and wherein said sensor loop additionally comprises:

a plurality of loop connectors wherein each loop connector has first and second loop-connector contacts and is configured to mate with said one of said sensor connectors; and

a plurality of switches, wherein each of said switches couples across said first and second loop-connector contacts of said loop connectors.

14. A sensor loop as claimed in claim 1 wherein:

at least one of said local sensor switches is provided by a local sensor; and

said local sensor includes a trip indicator isolated from said closed circuit, said trip indicator being configured to indicate whether said local sensor switch of said local sensor is in an open or closed condition.

15. A sensor loop as claimed in claim 1 wherein:

said local sensor switches of said sensor units are provided by local sensors that monitor an environmental phenomenon;

each member of a pair of said sensor units is positioned proximate a target position to provide redundancy with respect to sensing said environmental phenomenon at said target position;

each of said local loads in said pair of sensor units is associated with a normally open local load switch; and

said sensor loop additionally comprises a local indicator, said local indicator being coupled in series with said local load switches of said pair of sensor units so that said local load switches provide redundancy with respect to indicating said condition.

16. A method of distributing indications of a condition monitored at different locations, said method comprising:

positioning sensor units at said different locations;

configuring each sensor unit to include a local power source, a local sensor switch, and a local load electrically coupled in series, and a normally open local load switch coupled to said local load;

electrically coupling said sensor units in series to form a closed circuit; and

providing local indicators coupled to said local load switches and configured to indicate occurrences of said condition when said local load switches are open.

17. A method as claimed in claim 16 additionally comprising:

allowing an electrical current to flow in said closed circuit when all of said local sensor switches are closed;

closing said normally open local load switches when said electrical current flows in said closed circuit;

preventing electrical current from flowing in said closed circuit when any of said local sensor switches is open; and

opening all of said normally open local load switches when said electrical current is prevented from flowing in said closed circuit.

18. A method as claimed in claim 16 wherein:

said local indicators are solar collectors;

said local sensor switches of said sensor units are provided by anemometers; and

said providing activity comprises moving said solar collectors to wind stow positions when wind speed exceeds a predetermined threshold.

19. A method as claimed in claim 16 additionally comprising electrically isolating said local power sources from the earth and from each other.

20. A sensor loop for distributing indications of an excessive wind condition monitored at different locations, said indications being effected by moving solar collectors to wind stow positions, said sensor loop comprising:

a plurality of sensor units coupled in series to form a closed circuit, wherein each sensor unit comprises:

a local power source which supplies a local voltage;

a local anemometer having a local sensor switch which opens when said excessive wind condition is detected;

a local load exhibiting a local load impedance, said local load, said local sensor switch and said local power source being coupled in series within said sensor unit; and

a normally open local load switch coupled to said local load and to one of said solar collectors, wherein

said solar collectors are configured to move to said wind stow positions when substantially no current flows through said closed circuit and are allowed to refrain from moving to said wind stow positions when a current substantially equal to said local voltage divided by said local load impedance passes through said local loads.

21. A sensor loop as claimed in claim 20 wherein said local power sources provide outputs that are isolated from the earth and from each other.